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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,148	06/24/2002	Kiyokazu Ikeda	SONYJP 3.3-796	9928
530 7590 02/01/2011 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER TESLOVICH, TAMARA	
			ART UNIT 2437	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/088,148

**Applicant(s)**

IKEDA, KIYOKAZU

**Examiner**

Tamara Teslovich

**Art Unit**

2437

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12.21.10
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 21, 2010 has been entered.

Claims 1-2, 5, and 9-18 are pending and herein considered.

### ***Response to Arguments***

Applicant's arguments filed December 21, 2010 have been fully considered but they are not persuasive.

Applicant's sole argument is premised on amendments to each of his independent claims regarding the updating of only an indicated update file from among a plurality of update files in response to a request for the indicated update file. In response to Applicant's allegation that neither Kolls nor Ando discloses the abovementioned characteristics, the Examiner respectfully disagrees for the following reasons.

Lines 1-39 of column 44 of Kolls provides for a selection of digital information content based in part on GPs location data, user preferences, server settings, and road

hazards. By transmitting from the user device information regarding current location, the system is capable of returning map updates regarding impending road conditions, alternate routes (lines 32-39), and other geographically relevant content including but not limited to restaurants, service centers, hotels and even maps (lines 20-31). The ability of user to request information regarding the location of local establishments and alternate routes based on impending road conditions anticipates Applicant's downloading of specific indicated update files from a plurality of files in response to a request from the specified electronic appliance for the particular update file. Kolls provides for entire database of update files for everything from food establishments, to alternate routes, to coupons and events and provides for the updating of only selected files in order that the user device not be overburdened by information nor the services slowed down by the transmission thereof. Instead, Kolls allows a user to set preferences regarding how and when updates should occur and the particular sets of information that they would like to receive. These same devices allow a user at any point to request an alternate route and updated map for a variety of reasons including but not limited to the avoidance of impending road conditions/traffic and detours for food and services. Furthermore, both the Kolls and Ando reference disclose selective updating of map data in navigational apparatus in order to present a user with dynamic information without slowing down the overall system so much that it is no longer useful.

In view of the arguments presented above and the references in their entirety, the Examiner maintains her rejection of the claim in their entirety, amended below to reflect Applicant's amendments.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2, 5, and 9-18 remain rejected under 35 U.S.C. 102(e) as being unpatentable over United States Patent No. 6,856,820 B1 to Kolls and further in view of United States Patent No. 6,230,098 B1 to Ando et al.**

Regarding **claim 1**, Kolls discloses a service providing system (col.3 line 45 thru col.4 line 20), including, at least, a plurality of electronic appliances, a service server (Internet based server), a communication network, and an authentication server being connected to the communication network; each electronic appliance (in-vehicle device) being equipped with a wireless communication terminal function and being assigned a unique device ID, and the service server (Internet based server) having a function for providing a predetermined service and storing said unique device ID for each electronic appliance to which service can be provided, the service providing system comprising; authentication process means for allowing a communication terminal apparatus (global appliance/internet appliance) to access a respective electronic appliance (in-vehicle device) only when the communication terminal apparatus (global appliance/internet appliance) has been authenticated; registration means for registering said unique

device ID assigned to said each electronic appliance and transmission means for using said unique device ID to provide access to a specified service, via communication network, from the service server (Internet based server) to a specified electronic appliance and transmitting service information, which has a predetermined content for realizing the specified service, to the specified electronic appliance, in which the communication terminal apparatus and the service server can access the electronic appliance only through the authentication server (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), and in which said service information indicates an update for map information is available for the specified electronic appliance, and wherein the transmission means transmits to the specified electronic appliance update data of only an indicated update file for the map information from among a plurality of update data files responsive to a request for only the indicated update data file for the map information transmitted over the communication network by the specified electronic appliance (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data requested by the specified electronic appliance and transmitted to the appliance only includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

Regarding **claim 2**, Kolls discloses a service providing system (col.3 line 45 thru col.4 line 20), including, at least, a plurality of electronic appliances, a service server (Internet based server), a communication network, and an authentication server being connected to the communication network; each electronic appliance (in-vehicle device) being equipped with a wireless communication terminal function, and being assigned a unique device ID, and the service server (Internet based server) having a function for providing a predetermined service and storing said unique device ID for each electronic appliance to which service can be provided, the service providing system comprising; authentication process means for allowing a communication terminal apparatus (global appliance/internet appliance) to access a respective electronic appliance (in-vehicle device) only when the communication terminal apparatus (global appliance/internet

appliance) has been authenticated; first transmission means for providing access, via said communication network, from one of said electronic appliances to said service server (Internet based server) and transmitting information which has a predetermined content that can be used by a specified service from said one of said electronic appliances to said service server (Internet based server); and second transmission means for using said unique device ID to provide access to a specified service, via said communication network, from said service server (Internet based server) to a specified electronic appliance and transmitting service information, which has a predetermined content for realizing the specified service, to the specified electronic appliance only through the authentication server (col.3 line 45 thru col.4 line 20); in which the communication terminal apparatus and the service server can access the electronic appliance only through the authentication server (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), in which said service information indicates update data for map information is available for the specified electronic appliance, and wherein the second transmission means transmits to the specified electronic appliance update data of only an indicated update file for the map information from among a plurality of update data files responsive to a request for only the indicated update data file for the map information transmitted over the communication network by the specified electronic appliance (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his



specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data requested by the specified electronic appliance and transmitted to the appliance only includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

Regarding **claim 5**, Kolls discloses a service providing system (col.3 line 45 thru col.4 line 20), composed of an electronic appliance, a communication network, a communication terminal apparatus, and an authentication server, the electronic appliance (in-vehicle device) being one of an electronic appliance that is equipped with a mobile communication terminal function and a mobile communication terminal apparatus (global appliance/internet appliance) with a fixed access path to the

communication network and the authentication server being connected to said communication network, the service providing system comprising; access means that enables the communication terminal apparatus (global appliance/internet appliance) to access the electronic appliance via the communication network using a device ID store in a service server that has been assigned uniquely to the electronic appliance, the communication terminal apparatus accessing the electronic appliance only through the authentication server; terminal ID generating means , provided on said communication network, for generating a terminal ID for said communication terminal apparatus using information that identifies said fixed access path by which said communication terminal apparatus accesses said communication network; registration means for registering said unique device ID assigned to each electronic appliance and authentication process means provided in said authentication server, for using said terminal ID to perform an authentication process for said communication terminal apparatus that has accessed the authentication server and allowing said communication terminal apparatus to access said electronic appliance only when the communication terminal apparatus has been authenticated; and transmission/reception means for receiving and transmitting service information, which has a predetermined content for realizing a specified service, between said communication terminal apparatus that has been authenticated by said authentication process means and said electronic appliance (uniquely identify and transfer information), in which the service server can access the electronic appliance only through the authentication server (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), in which said service information indicates update

data for map information is available for the electronic appliance, and wherein the transmission/reception means transmits to the electronic appliance update data of only an indicated update file for the map information from among a plurality of update data files responsive to a request for only the indicated update data file for the map information transmitted over the communication network by the electronic appliance (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data requested by the specified electronic appliance and transmitted to the appliance only includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through

the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

Regarding **claim 9**, Kolls discloses a communication apparatus (col.2 lines 5-65) for controlling communication between a plurality of electronic appliances, each electronic appliance being connected to a network, being provided with a unique device ID for identifying the electronic appliance, and being capable of transmission, the communication apparatus comprising communication means for communicating with another communication apparatus via said network; storage means for storing group information in which the plurality electronic appliances, which are permitted to communicate between themselves after the communication is authenticated, are registered as a group; authentication process means for allowing a communication terminal apparatus (global appliance/internet appliance) to access the electronic appliance (in-vehicle device) only when the communication terminal apparatus (global appliance/internet appliance) has been authenticated; registration means for registering said unique device ID assigned to each electronic appliance; a service server operable to provide service information to one or more of the electronic appliances; and judgment means for judging, based on unique device IDs transmitted via the network before communication commences between said plurality electronic appliances and group information stored in said storage means, whether the communication is permitted; control means for having said communication means transmit a result judgment means to an exchange apparatus that is connected to said network and performs an exchange

process for communication between electronic appliances based on the transmitted unique device IDs, in which the respective device and the service server can access the respective electronic appliance or appliances only through the authentication server (uniquely identify and transfer information) (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), in which said service information indicates update data for map information is available for the one or more of the electronic appliances, and wherein the service server provides to the one or more of the electronic appliances only an indicated update file for the map information from among a plurality of update data files responsive to a request for only the indicated update data file for the map information transmitted over the network by the one or more of the electronic appliances (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data requested by the specified electronic appliance and transmitted to the appliance only includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS

is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

Regarding **claim 10**, Kolls discloses wherein a wireless communication is performed between said electronic appliances and the exchange apparatus (col.3 line 45 thru col.4 line 20).

Regarding **claim 11**, Kolls discloses wherein said electronic appliances are navigation apparatuses (col.3 line 45 thru col.4 line 20).

Regarding **claim 12**, Kolls discloses wherein one or more of said electronic appliances are mobile telephones (col.3 line 45 thru col.4 line 20).

Regarding **claim 13**, Kolls discloses wherein each of said electronic appliances is connected to said communication means in said exchange apparatus, and when communicating, each of said electronic appliances transmits said unique device ID to said communication apparatus, said exchange apparatus transmits a communication

means ID for specifying said communication means to said communication apparatus, said communication apparatus authenticates said electronic appliance based on said group information, by referring combination of said transmitted unique device ID and said transmitted communication means ID (col.1 lines 40-48, col.5 lines 42-63).

Regarding **claim 14**, Kolls discloses wherein the group information is generated when an electronic appliance communicates with the communication apparatus via the network (col.3 line 45 thru col.4 line 20).

Regarding **claim 15**, Kolls discloses wherein the group information also includes content data that can used by the electronic appliances which are registered in the group information (col.3 line 45 thru col.4 line 20).

Regarding **claim 16**, Kolls discloses wherein the content data is geographical information (col.3 line 45 thru col.4 line 20).

Regarding **claim 17**, Kolls discloses a service providing system operable within the Internet, said system comprising a navigation unit operable to provide navigational and positional information, said navigation unit being assigned a unique identification ID (col.32 line 49 through col.33. line 34); a service server operable to provide a predetermined service and to store said unique ID for said navigation unit to which service can be provided (col.34 lines 36-62; col.35 lines 1-15); a communication

network connectable to the Internet (col.34 lines 19-43); an authentication server operable to determine if access to the navigation unit is permissible (col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23); and a communication terminal apparatus connectable to the navigation unit and the communication network and operable to enable information to be supplied to the navigation unit from the Internet by way of the communication network and to enable service information to be supplied to the navigation unit by use of said unique ID from the service server by way of the Internet and the communication network (col.34 lines 36-62; col.35 lines 1-15), in which the communication terminal apparatus and the service server can access the navigation unit only through the authentication server (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), and in which said service information indicates update data for map information is available for the navigation unit, and wherein the service server supplies to the navigation unit update data of only an indicated update file for the map information from among a plurality of update data files responsive to a request for only the indicated update data file for the map information transmitted over the communication network by the navigation unit (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data



requested by the specified electronic appliance and transmitted to the appliance only includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

Regarding **claim 18**, Kolls discloses a navigation device to which is assigned a unique identification, the navigation device comprising (col.3 lines 45-67): a wireless communication terminal operable to transmit and receive information over a communication network (col.3 line 45 thru col.4 line 20); and a control unit including a processor, wherein the processor is operable to use service information received at the wireless communication terminal from a service providing system to realize at the navigation device a predetermine service provided by the service providing system (col.3 line 45 thru col.4 line 20), wherein the service providing system has functions for

providing the predetermined service and storing the unique identification for the navigation device to which service can be provided, for allowing access to the navigation device only when the navigation device has been authenticated, for registering the unique identification assigned to the navigation device, for using said unique identification to provide access to a specified service (global appliance/internet appliance), via the communication network, from the service providing system to the navigation device and for transmitting specified service information which has a predetermined content for realizing the specified service, to the navigation device (uniquely identify and transfer information) (col.3 line 45 thru col.4 line 20; col.14 lines 11-49; col.26 lines 65-67; col.55 lines 4-23), wherein said specified service information indicates update data of only an indicated update file for map information is available for the navigation device, and wherein the update data for the map information is transmitted from the service providing system over the communication network to the navigation device responsive to a request for the update data for the map information transmitted from the wireless communication terminal over the communication (col.20 lines 60-68; col.32 lines 49-67; col. 34, lines 20-34; col. 40, lines 13-25, 54-58, 65-67; col. 44 lines 1-39).

While Kolls clearly discloses the requesting and downloading of updates including those relevant to geographical location and other map data throughout his specification (see col.34 lines 20-34; col.40 lines 13-25, 54-58, 65-67; col.44 lines 1-39, 56-64; col.45 lines 52-60), Kolls fails to particularly point out where that that update data requested by the specified electronic appliance and transmitted to the appliance only

includes one or more differences between updated map information and a previous version of the map information.

Ando discloses a map data processing apparatus, method and system whereby map data storage within a vehicle's GPS may be updated using the latest map data transmitted from an information center whereby the information transmitted to the GPS is differential data indicative of difference between the latest data held by the center and the map data held by the vehicle (GPS) (see Abstract; Figures 3-4; col.6 line 60 thru col.7 line 17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Kolls the updating of a GPS's map data through the transmission of differential data as described in Ando to provide for updated route information while reducing transmission time.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571) 272-4241. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tamara Teslovich/

Examiner, Art Unit 2437

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2437